

PCI Plant and Erection Alert Regarding Coil Inserts

from QA Supplier Committee (Final 11/22/16)

This alert is intended to inform both Precasters and Erectors of the potential differences when using coil inserts, coil nuts, coil rods and coil bolts. There is currently no national standard for the manufacturing of these products. Each manufacturer has their own standard, with varying dimensions, tolerances and capacities. As there is no national standard for the manufacturers to follow, there is no guarantee that parts from different manufacturers will work together as intended and designed.

If a coil insert or nut is bought from supplier "A" and the corresponding matching coil rod or bolt is purchased from supplier "B", the capacity of this connection could be impacted due to a loose fit. The other extreme would result in the coil rod or bolt not being able to thread into the coil insert or nut due to a tight fit.

In addition, when coil threaded systems are used for repetitive lifting and handling applications they are prone to higher wear factors on the thread engagement connections than UNC systems. Care must be taken to inspect all parts of the coil system to ensure tolerances have not been compromised due to use and wear.

The committee will be attempting to write a standard that could be submitted to ANSI (American National Standards Institute) for their review and approval. This process will take some time, and in the mean while it is highly recommended that you purchase rods and inserts from the same supplier (manufacturer) or have a quality inspection system in place that allows you a way to verify overlap tolerances between systems so you are confident that the system does provide for proper engagement.